Narrating Objects, Collecting Stories

Essays in Honour of Professor Susan M. Pearce

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Kate Hill

The relationship between the material world and the formation and development of gendered identities is one which has exercised scholars from a variety of disciplines. Moreover, it is not fixed, but operates in historically specific ways (for example, see contributions to Goggin and Tobin 2009, especially Tobin; Edwards 2009; Lemire 2005; Macleod 2008; Belk and Wallendorf 1994). Equally, the ways in which science has been gendered have been an issue for many historians, who have tended to focus on scientific texts and their authors, readers and effects (Shteir 1996; Myers 1997; essays in Shteir and Lightman 2006, especially those by Gates and Lightman). This chapter, which attempts to focus on women's involvement with natural history specimens in the late Victorian period (though it is not actually possible, or desirable, to separate the textual and the material here), argues that the role of materiality is more active in the shaping of gendered identities than has been recognized, and suggests that the development of a modern, segmented conception of the natural material world fostered the development of new gender identities (Merrill 1989: 12).

Natural history was a very widespread interest in the Victorian period, but women and men engaged in it in different ways, and certain dealings with natural history specimens were understood as gendered (Allen 1976: 113, 124, 150–2; Shteir 1996). This chapter will examine a number of women whose engagement with natural history material exemplifies a range of strategies. Gender was not the only identity which emerged through interaction with natural history specimens; other important identities such as class, professionalism and a public persona were also visible. However, it is arguable that gender was central to the articulation of these other identities, and thus to recognize their importance is in some ways to restate the importance of gender.

Of these identities, class had the most complex relationship with gender. All classes were involved in collecting and classifying specimens, but it is also clear that, for example, geology was very class-conscious in the first half of the nineteenth century. It has been described by Knell as forming a pyramid, with all the control exercised by the upper-middle-class men who occupied the most privileged positions in national societies. Working-class geologists, and even provincial leaders, functioned more as labourers and field workers for those at the top of the pyramid (Knell 2000: 6–7, 42, 326). While middle-class women were encouraged to take an interest in natural history, there is no sign of working-class

women's involvement, although working-class men, especially in the early nineteenth century, were often heavily involved (Secord 1994; Merrill 1989: 44–6; and see Gooday's exploration of the extent to which working-class natural history was encouraged as a prophylactic against dissipation and political agitation in the 1860s, 1991: 319–20). This could produce some interesting alliances between middle-class women and working-class male naturalists, as in the case of Beatrix Potter (see below), or a sense among middle-class male scientists that the threat to science came from 'weak-minded women and working-class agitators', as Willis suggests (2006: 208).

The dividing line between amateur and professional naturalist was blurred and remained so throughout the period. While professionalization was taking place to a greater or lesser extent, the categories of amateur and professional were not distinct at this period (Alberti 2001). Professional naturalists asserted that theirs was the only proper way to carry out high-quality work, but they were supported by an army of amateur field workers, patrons and the networking and publishing opportunities offered by societies in their areas. Willis argues that when scientists achieved professional status, they resumed amateur practices (2006: 210). Equally, professionalization did not just mean professional positions in research organizations and higher education; it could be argued that the popularization of natural history itself offered increasing possibilities for professional science writers and illustrators, which women, in particular, took great advantage of. However, this was not seen as properly professional in the same way, and continued to have connotations of amateurism (Shteir 1996: 151). Moreover, the question of professionalization cannot be separated from the question of gender because 'professionalizers' thought that reforming structures and institutions would also be a way of purging science of women. T. H. Huxley 'made it his special mission to drive women from professional scientific societies and from positions of importance in scientific institutions' (Lightman 2006: 228; see also Shteir 1996: 157). Thus, it was not just that science increasingly took place in scientific institutions; those institutions were also intent on excluding women. As a result, men found it much easier to move between 'amateur' and 'professional' settings as Alberti shows (although he also highlights the extent to which women could achieve professional status as writers and popularizers in natural history) (Alberti 2001: 121–2).

The public–private divide is also of relevance here. To what extent are apparent gender differences in natural history in fact a reflection of the fact that natural history took place in public and in private, and only that which was public received public approbation? To an extent, this is a valid concern, but again, in practice, it is very hard to establish a firm dividing line between private and public. This is especially the case if one focuses on the interactions with natural historical fieldwork and specimens undertaken by naturalists, nearly all of which began with ostensibly private fieldwork as a hobby. Some moved into the public sphere through publication, the fame of their collection, or selling, or donating, their collection to a museum (see, for example, the careers of Mordecai Cooke and George Massee, the first and second keepers of mycology and cryptogamic botany in general at Kew: see English 2004; Jay, Hobbs and Noble 1992).

This chapter will pay particular attention to women naturalists' relationships with museums precisely because the museum was the (more or less) public face of objects of natural history. While women were able to achieve a public status for their things through the museum, they did so in much smaller numbers than did men.

Gender, then, was important in determining whether naturalists were seen as 'amateur' or 'professional', public or private, and the gendering of natural history practices was also inflected by class. So, if naturalists could be characterized by their class or gender, or to a lesser extent by whether they were amateurs or professionals, their engagement with the materiality of natural history was a means by which they could transcend, or modify, those social categories. It was itself an agent in the fluidity of the natural history community in the late nineteenth and early twentieth centuries (Naylor 2002).

Collecting, as with other interactions with material culture, does not merely offer a reflection of gender identities and ideologies; rather, through the individual's interaction with irreducible materiality there is scope for repositioning, negotiation and contestation of those identities and ideologies. It can even be an active intervention in the formation of the self and the transformation of culture (Macleod 2008: 17). Additionally, collecting which ended up in the museum, was partly, but only partly, subordinated to a wider construction of nature and men's and women's relation to it. Museums functioned as 'contested discursive mechanisms that enable as well as erase gendered identities' (McTavish 2008: 94), and acted to construct nature and subjects' positions in relation to it.

Women as popularizers and illustrators in natural history

Natural history was widespread in the nineteenth century and both boys and girls were encouraged to take an interest in it (among the middle classes). Early in the century botany, in particular, was perceived as especially feminine (Shteir 1996: 165). Children's interest was inculcated largely through books written by middle-class men and women introducing the techniques of collecting and preserving, the skills of close observation and the basics of classification and Latin nomenclature. These books also popularized a view of nature as seamless and of nature study as comprising both 'scientific' and aesthetic elements (Kingsley 1855; Gosse 1853; Harris and Johnston 1998; Merrill 1989: 14–15). In addition, the middle of the nineteenth century was a period of 'crazes' in natural history, such as the fern craze, which were widely viewed as feminine in nature, reflecting the perceived tendency of women to get carried away and to lack application and seriousness in their studies (Allen 1976: 108–25; 1969). The view emerged, therefore, of feminine natural history as associated with child-rearing, domestically based, essentially 'hobbyist' in nature and about the development of what we might call 'transferable skills' of observation, perseverance (insofar as women's natural tendency to flit from hobby to hobby could be overcome) and self-discipline (Shteir 1996: 165; Gates and Shteir 1997: 8–9). While this could restrict the way women engaged with natural history, it also

offered substantial opportunities in what has been characterized as a 'woman-centred scientific pedagogy' (Shteir 1996: 237) and as illustrators, even though illustration itself was seen as subservient to text (Gates 2006: 193). Indeed, Lightman argues that women used illustration to highlight their detailed observation and accurate reproduction of specimens, which were widely acknowledged to be female strengths but also, increasingly, to demonstrate their facility with advanced scientific equipment such as powerful microscopes, in order to bolster their own authority in the light of male assertions of the limitations of women naturalists (Lightman 2006: 226–32). Feminine gendering of natural history opened up opportunities for women as authors and illustrators, but how did it affect women's interactions with actual specimens?

Beatrix Potter and the gendering of museums

The case of Beatrix Potter is of central interest here because of the multiple ways in which she interacted with natural history; she collected specimens and viewed and commented on others' collections; she drew and painted specimens, including microscopical drawings; she wrote a scientific paper which was presented to a scientific society; and she wrote children's stories which drew on a wide knowledge of nature, while simultaneously incorporating considerable amounts of anthropomorphism. She did not, however, as far as we know, donate any specimens to museums. This section will attempt to elucidate the extent to which gender was an emergent or shaping factor in her activities.

Beatrix Potter (1866–1943) was born into an upper-middle-class family in London, and spent a sheltered childhood and youth living at home. She attended no educational institutions, and except for a few drawing lessons was educated at home. The family regularly took long summer holidays in Scotland and the Lake District, during which she explored the surrounding countryside – her father was a keen photographer and she assisted him, but she also collected specimens, and drew and painted them (Taylor 2004). She continued to live with her parents, until, in her thirties, she began to be successful as a children's author, writing and illustrating a series of animal tales beginning with *The Tale of Peter Rabbit* (privately published 1901; Warne Brothers 1902). In 1906 her increasing income allowed her to buy a farm in the Lake District, and from the 1920s she became an increasingly full-time sheep farmer (Taylor 2004).

Potter herself felt gender was an important factor in her engagement with natural history, and she had some experience of the professional men who are alleged to have tried to exclude women from the field. She wrote of Sir W. H. Flower, the Director of the British Museum (Natural History) (hereafter NHM), that 'he knows me ... but not at the museum'. He appeared not to acknowledge her within the museum, though he knew her socially (Linder 1966: 398; Gilpatrick 1972: 40). Flower had a close professional relationship with Huxley and may well have shared his views on women and science.

Beatrix Potter became interested in collecting and studying fossils through a family tradition of female geological activity, namely the influence of her cousins. One of them, Mary Hutton, built an impressive collection of fossil sponges and

bryozoa which was donated to the NHM on her death in 1937 (Gardiner 2000). Potter took to collecting energetically ('I found some interesting fossils, also I have found out which stone to split and how to use a cold chisel'), and was introduced to Henry Woodward, the keeper of geology at the NHM (Linder 1966: 355). She became quite friendly with his daughter, who 'was employed by her father to illustrate his papers' (Gardiner 2000: 38). She spent much time at the NHM (and at the Manchester Museum when visiting relatives), as she developed a new interest in fungi and lichens. However, she had a very low opinion of the expertise of many of the staff (though she thought the staff at the Botanical Gardens, Kew were worse), and she felt that 'one must not speak to them' (Gilpatrick 1972: 40, 90). She explicitly said (though in her encoded journal) that many of the staff at Kew were misogynists and though she does not say the same about the museum staff, it is clear she felt that they did not take her seriously.

Her ground-breaking paper on germinating fungal spores was presented to the Linnaean Society in 1897 by a male proxy, as women were not allowed to be members or to attend meetings at this time. It was, apparently, well received (Jay *et al.* 1992: 120). Potter's paper was never published, for reasons which are unclear, and shortly afterwards she started writing children's books (Gilpatrick 1972: 38; Gardiner 2000: 46). The Linnaean Society, along with other of the more 'prestigious' scientific societies, did not start admitting women members till 1904, while less prestigious societies had admitted women from the start (Allen 1980). Potter was just a few years too early to be a full part of this community; her experience is comparable to that of Nina Layard, who was unable to present her archaeological paper to the Society of Antiquaries, despite Sir John Evans's lobbying (Layard was later one of the first female members of the Society of Antiquaries and also became a member of the Linnaean Society in its second year of admitting women) (Plunkett 2004, 1992).

Potter's working methods in mycology can, to a certain extent, be reconstructed. She worked closely with Charles McIntosh, the 'Perthshire Naturalist', a rural Scottish postman who had developed a wide knowledge of the flora on his long rounds, and collected ferns, mosses and fungi. Potter met him during one summer holiday when he was the family's postman, and they corresponded regularly when she was back in London. Initially she sent him drawings of fungi along with thoughts and questions about their identification. He also began to send her specimens of fungi which she then drew. They discussed the merits of various reference books, and he gave her advice on how to improve her drawings as botanical evidence (Taylor 1989: 18–19, 37–41). Within a few years she was also executing microscope drawings of fungal spore cases and spores. From here she moved to germinating spores and, thus, to the cutting edge of the discipline. It was on these experiments that she wrote her paper (Jay *et al.* 1992).

Potter made a virtue out of her close contact with the live specimens themselves. She wrote to McIntosh, 'we find some people make theories out of dried specimens without the least experience of the way things grow' (Jay *et al.* 1992: 108). She thus upheld a view of nature study where collection in the field and the indoor study of specimens were indivisible continuations of each other. The men she clashed with at the NHM and at Kew had firmly decided in favour of

the indoor study of specimens in laboratories and museums as the way in which scientific knowledge should be produced (Jay *et al.* 1992; Gooday 1991).

Potter was not supported as a naturalist at home; her parents were not interested in natural history and found some of the slimes and moulds a little repulsive (Linder 1966: 428; Gilpatrick 1972: 94). She was restricted to keeping her collections in her bedroom and other unsatisfactory domestic spaces, without a study or the authority over space that a head of the household would have. It is clear that, as a dependent daughter, there were limitations on how fully she could devote herself to her interest (Linder 1966: 400). Potter's greatest success in working with nature can arguably be found in her botanical drawings and in her use of natural models for her children's books. In this she was comparable with other Victorian women who eschewed collecting natural objects for drawing them in the wild, among them Jemima Blackburn, the bird painter. 'Dead nature', as found in museums, was, to them, the antithesis of the approach they wanted to take: a strategy of resistance to 'official' and 'insider'-approved ways of working (Fairley 1988). Both Potter's and Blackburn's activities can be described as 'concrete, specific, sensory and colourful' (Merrill 1989: 13), thereby asserting a natural history that did not discriminate between the scientific and the aesthetic.

Women's collecting and donating in natural history

Potter's involvement with the materiality of natural history is similar to that of many other women who did not distinguish clearly between nature and culture; the field and indoor study; art and science; public and private locations for science; and who asserted a moral superiority for their approach over a 'masculine' public, professional and museum-based approach. In this section, I investigate women's small-scale and non-specialist collecting through their donations to museums. Methodologically, this is a valuable, though problematic, mechanism for uncovering women's collecting as much of it was too insignificant to be visible any other way. However, it is hard to unpick women's donations of natural history, as many gave through or on behalf of their husband or another family member. The actual practices underlying and producing these collections are almost impossible to reconstruct (Martin 1999: 72). The respective valuations of a husband's and wife's contribution to a collection seem determined by pre-existing understandings of male and female collecting, rather than by what actually happened. Women clearly had a range of involvement in the acquisition and donation of these collections, from accidental acquisitions, to hobby or serious collecting, to inherited material and that which belonged to their husband. Their involvement in natural history was mainly domestic, with rare forays into the museum. This makes it very hard to evaluate how they interacted with their specimens and what those specimens meant to them. However, there are clear signs that they conceived of 'nature' as both domestic and institutional, aesthetic and scientific, moral and dispassionate, or, even, that they did not acknowledge these divisions. Certainly they did not always conceive of ownership of collections in a straightforward way.

For example, Mrs Percy Sladen gave her husband's large zoological and fossil collection to the NHM and Exeter Museum after his death. This collection cannot simply be seen as her husband's. Although when they married she apparently did not have natural history interests, she clearly became involved in his work, as four years after his death she became one of the first women to join the Linnaean Society. It seems likely she used his collection to become knowledgeable in natural history, and may have contributed to its classification (Nicholls 2003). Another instructive example is a Mrs Smith, who collected fossils in the mid-nineteenth century, buying from quarrymen and other collectors but also collecting herself. After her death, her collection passed to her daughter, but both she and her husband also died fairly soon thereafter, leaving it in the hands of Smith's second wife who, after about a year, sold most of it to the British Museum. However, her husband had bequeathed a small part of it to another museum and the second wife kept a further part of the collection. She also kept the catalogue for another fourteen years (Lankester 1904: 327). The existence of a catalogue is an important element here in transforming the collection into valuable scientific data, rather than an amusement.

These examples show that women's collecting was not clearly domestic or institutional, and that ownership of such collections was fluid. There are indications that men's and women's collections occupied different spaces in the home, with men's primarily in the study and women's primarily in the drawing-room. They may have also had different types of display furniture for respective collections (Pearce 1993: 25–7). However, some collections clearly occupied less gendered space, such as the bedroom, and it seems likely that collections and parts of collections moved between spaces and display furniture (Martin 1999: 71). Thus, it will never be possible to be definitive about whether a donation came primarily from a man or a woman, and probably many women collectors are unrecorded in their husbands' donations.

That many women's collecting practices continued to be anchored in a gendered understanding of natural history is suggested by a particular trend in museums around 1900. Several museums had displays of fresh wild flowers and/or Wardian cases containing growing plants, which were usually stocked and tended by a group of volunteers. Women figure very heavily in these groups; at Manchester Museum they formed between 60 and 100 per cent of the group, while at Bristol Museum the Wardian cases were 'under the sole charge of Miss Ida Roper FLS' (Manchester Museum 1911–12, 1912–13; Bristol Museum and Library 1910–11). Collecting and displaying wild flowers was something that women had been accustomed to do in a domestic setting; it required some knowledge but not a specialism in botany, and there was a long-standing association between flowers and the feminine (Shteir 1996: 158–9). Women involved in this work, therefore, made room for themselves in public spaces and institutions of science, by inserting feminine practices alongside those of men. This allowed them to claim some authority over a small part of the museum. Without the testimony of the women involved in these practices, we are unable to say definitively how they felt about wild-flower collecting for museums. It is clear that the women involved included those with a 'hobbyist' approach to natural history, married

women and Fellows of the Linnaean Society (Manchester Museum 1911–12, 1912-13; Bristol Museum and Library 1910–11). It is also clear that their role was to mediate between the field and the institution (and, indeed, the visiting public) rather than to have an actual base in either of these locations.

So, collections made by men and women were valued in the domestic sphere, passed on to relatives and partly donated to museums. Gendering of collections in the private sphere might or might not be particularly marked, and the demarcation of private and public spaces for collections was also porous. Women's collecting practices tended not to demonstrate ownership and moved easily between 'scientific' and moral or aesthetic approaches.

Modernity, natural history and feminism

Natural history artefacts could, by contrast, be used to construct the naturalist subject as ungendered, defined rather by a specialist relationship with natural artefacts which yielded knowledge. Despite the insistence of Huxley and his colleagues that such an identity was masculine, it was open to women who were willing and able to leave behind the old, gendered naturalist model of a 'field' of specimens which spanned the unmediated natural world and the cultural world in which they were given meaning. A number of women succeeded in creating modern, feminist identities through their involvement with natural history, though not necessarily in de-gendering understandings of natural history altogether. These were collectors and donors who utilized modern understandings of science and nature, and exploited the ability of artefacts to shift the gendering of collecting *and* museums.

The collections of some of the most important women collectors and donors of natural history are to be found at Manchester Museum (Alberti 2009), such as those of Lydia Becker, Elizabeth Anne Lomax and Caroline Birley, as well as Marie Stopes (Desmond 1994: 436; Bolton Museums 2007; Manchester Museum 1895–6, 1903–4, 1906–7, 1908–9, 1910–1). These were not professional collectors, with the exception of Stopes, perhaps, but may be seen as having forged new paths through the changing natural history landscape of the late nineteenth century; paths which renegotiated the gendering of collecting, natural history and museums.

Lydia Becker wrote a popular natural history text for beginners, aimed especially at young women, that differed from earlier popular texts in being more overtly 'scientific' and less gendered. She was also an advocate of proper science education for girls in schools and colleges, thereby rejecting a separate, 'feminine' style of natural history (Walker 2004; Shteir 1996: 227–31). It is significant that she was also an advocate of women's suffrage. She was thus interested in a mode of collecting that collapsed gendered distinctions and aligned women more closely with public life and roles. The same is true of Marie Stopes, who was a palaeobotanist before moving on to family planning. She worked at Manchester University and in the Museum, to which she donated her specimens (Hall 2004; Manchester Museum 1904–5, 1905–6, 1906–7). Her natural history was definitively not domestic.

Caroline Birley, who during her lifetime had her collection in her own museum, private but open to the public, had independent means. She too, like Becker and Stopes, published in popular and learned journals. In a sense, she bypassed the problems of accessing public space for her collecting, by making her private space public; while this was less prestigious than a publicly supported museum and was only made possible by her wealth, it was a very effective way of circumventing the masculine culture of such museums and keeping control of her objects, and may be read as an attempt to create an ungendered natural history space. Equally she was part of a much less gendered network of naturalists than Potter. She was friendly with Henry Woodward, the keeper of Geology at the NHM, who wrote several articles based on her fieldwork and named several species after her, while Potter was friendly only with his daughter (Bolton Museums 2007).

Insofar as we can reconstruct the practices of these women as naturalists, we can see that they saw nature study as an ideally ungendered practice and understood nature itself to be much more compartmentalized than either Potter or most female museum donors. Becker went beyond collecting and classifying, and undertook innovative analysis of her specimens, enabling her to develop theories about sexual reproduction in hermaphroditic plants (Bernstein 2006: 91). It has been argued that she 'defeminized' botany by refusing to have any truck with figurative language or decorative illustration; certainly she was a promoter of the idea that the new figure of the scientist, in some ways hermaphroditic also, was distinguished by systematic, rational study and the possession of specialized techniques, rather than by any gendered qualities (Shteir 1996: 228–9, Bernstein 2006). Both Birley and Stopes undertook extensive fieldwork but, for Stopes, this was a long way from the sociable, communal fieldwork of earlier practitioners; her fieldwork was funded by the Royal Society, in the case of her Japanese expedition, and commissioned by the Canadian government, in the case of a study of carboniferous flora in New Brunswick. Moreover, her fieldwork was underpinned and preceded by academic qualifications which showed this fieldwork to be rigorous: she had a BSc and a PhD, and had been invited to prepare the catalogue of cretaceous flora for the geological department of the NHM (Hall 2004). The reciprocal connections which constituted Stopes as a scientist, and her collections as scientific data, are clear.

This group of donors can be seen as working to counter the idea that professional science was inherently masculine, by attempting to create a natural historical discourse and practice that was ungendered. To this end they engaged with scientific societies in new ways. Birley was a member of the British Association for the Advancement of Science (BAAS), the Geologists' Association from 1890 and the Macalogical Society from 1894 (Bolton Museums 2007). The BAAS was an important society for several of them (Stopes's parents allegedly met there), but was associated with socializing and had internal barriers for women (Bernstein 2006: 85–93). Stopes became a Fellow of the Linnaean Society in about 1908 (Hall 2004). They were thus only partially successful in de-gendering these organizations.

Collecting and donating to an important museum could be, quite instrumentally, a way of improving a woman's career possibilities by demonstrating

expertise and networking with museum staff. However, women were unable to use their collections fully to de-gender masculine scientific institutions.

Conclusion

Natural history objects could perform a number of roles in the late nineteenth and early twentieth centuries: they could be decorative, they could constitute the self-improving subject or they could form scientific data. Increasingly, though, they could only perform one of these roles at a time. A modern sense of natural history objects as scientific specimens worked against a feminine practice of natural history, but partially enabled the assertion of a new de-gendered identity of scientist.

This chapter has argued that women used natural history collecting as a way of creating and modifying gender identities. These women collectors positioned themselves in relation to nature and gender, and in relation to popular and 'high' science, through a range of textual, graphic and material strategies, which were produced in the face of attempts to define science as exclusively masculine. Some women, such as Beatrix Potter, worked with a gendered understanding of natural history practices and asserted the moral superiority of a 'feminine', unified approach to the natural world across the field and the institution, combining imagination and precise observation. Other women took on the masculine model of public-professional science and attempted to de-gender it. While neither approach was entirely successful in this period, the latter produced major gains in the twentieth century. This chapter has also argued for an appreciation of the role of the material, as well as the textual, in constituting gendered identities, despite the methodological difficulties in doing so.

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